

Preface

Only a few years ago the impact of computing on the organization was limited to specific application areas. We are now developing systems that broadly affect the entire structure. For such systems to be effective and lasting in their benefit, the total needs of the organization must be evaluated and considered in their development. This issue of the *IBM Systems Journal* is devoted to enterprise analysis techniques in recognition of their role in the development of systems that are responsive to the needs of the entire enterprise.

Our first paper describes requirements gathering techniques and alternatives at the organizational and systems level. The author analyzes the fundamental problems encountered in the requirements gathering process. A model is provided for the selection of techniques based upon the complexity of the problems being addressed, and the inherent constraints of people as information processors and problem solvers.

Through a comparison of the Business Systems Planning (BSP) and Business Information Control Study (BICS) methodologies, our second paper provides insight into the techniques used to determine organizational information needs. In addition, significant trends in the development of enterprise analysis techniques are discussed.

Traditionally the implementation of the Business Systems Planning methodology has involved extensive manual data manipula-

tion. A new approach, presented in our third paper, uses a data dictionary to support the study of an enterprise. The use of the dictionary may result in significant time savings and provide a vehicle for future maintenance.

Our next paper extends the concept of enterprise analysis to include an integrated development system. The approaches proposed seek to shorten the application development cycle as it exists today.

As we shift from stand-alone, application-oriented systems to systems that support the entire organization, the techniques used in financial analysis and justification must also evolve. Our final paper shows why this evolution is taking place, and proposes an approach to the justification of data-managed systems.

Enterprise analysis is still in its formative stages. The papers in this issue present a sampling of some of the new techniques used in the development of systems that consider the information needs of an entire organization.

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Editor